

Docket No.: EVAN-0973
Application No.: 10/631,315
Amendment Date: July 11, 2006
Reply of Office Action of: April 18, 2006

REMARKS

Claims 1-4, 6-20, and 60-63 are currently pending in the application. Applicant has canceled claim 5, and amended claims 1-4, 6-17, 20, 60 and 62, and added claim 63. Applicant requests reconsideration of the application in light of the following remarks.

Restriction Requirement

Applicant affirms the election of the first group and the species of Figures 2B and 1, claims 1-20. Claims 60-63, which read on the elected invention, have been added. The election is made with traverse since many of the features of the non-elected inventions overlap with the elected invention for Examination purposes even though the inventions defined by the Examiner may be patentably distinct. However to advance the prosecution, Applicant has canceled the non-elected claims for possible submission in a continuing application. No correction to the inventorship is required.

Rejections under 35 U.S.C. §112

Claims 6-17 stand rejected by the Examiner under 35 U.S.C. 112. In accordance with this rejection, the claims have been amended to comply with the examiner's suggestions and are now believed to conform with Section 112. Applicant respectfully requests that the rejection of claims 6-17 under 35 U.S.C. § 112 be withdrawn.

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Rejections under 35 U.S.C. §102

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claims 1-3, 7, 8 and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Marlatt et al. (U.S. Patent No. 5,263,527, hereinafter “Marlatt”). Applicant respectfully traverses this rejection and request reconsideration of the claims.

Applicant respectfully requests that the anticipation rejections of claims 1-3, 7, 8, and 10 be withdrawn. Claim 1 has been amended to recite that the clutch includes “a rotor and a flex plate, the flex plate electromagnetically urged into engagement and out of engagement with the rotor by the controller.” This is not provided by Marlatt. In fact, although Marlatt refers to a portion of his device as a clutch, that portion fails to meet the common definition standard that should be required for “a clutch”. Rather, the structure for holding the door shaft against turning except with the motor 36 is a set of intermeshing crown gears formed by teeth 52, 54, as set forth in column 3, line 60 to column 4, line 4. Thus, Marlatt’s reference to a “clutch” would have been more accurately described as a “release” or a “locking mechanism”. In any case, Marlatt does not have a rotor, a flex plate, and the electromagnetic feature now recited in claim 1. Therefore, claim 1 is considered to be allowable over Marlatt.

Furthermore, the type of engagement for stopping the drive shaft is not merely an obvious matter of design choice because the specifics of the present invention provide an advantage not enjoyed by the Marlatt or the other references relied upon. That is, the clutch of present invention may be pulsed on and off in order to effectuate a controlled descent of the door. This controlled descent of the door is also facilitated by the smooth frictional engagement surfaces between the

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rotor and the flex plate, in accordance with the present invention. Unlike the toothed locking arrangement of Marlatt, the present invention is capable of locking the door shaft at an infinite number of rotational positions so that a pulsed engagement and disengagement provides a controlled lowering of the fire door. Marlatt and the fire doors of the past, on the other hand, simply release the door in the case of an emergency and the door comes crashing down. This is destructive to the door and anything in its path. The controlled lowering of the door of the present invention has the advantage of preserving the door even though it has been lowered in an emergency. Furthermore, the controlled descent effected through the clutch mechanism of the present invention provides additional time for occupants to leave the emergency area without the greater dangers of being injured or trapped by the falling fire doors of the prior art. Still further, the clutch release of the present invention enables the system to remain operable so that an occupant can temporarily override the fire condition in order to egress safely.

The above advantages are provided by the electromagnetic aspect of the clutch of the present invention. Marlatt, on the other hand, has a mechanical release that is irreversible once it has been actuated. That is, the door will fall uncontrollably once the release of Marlatt is actuated.

For these reasons, claim 1 is considered to be allowable and withdrawal of the rejection based on Marlatt is respectfully requested.

Claims 2-3, 7, 8 and 10 are considered to be allowable as depending from allowable base claim 1 and for additional patentable features as may be appreciated by the Examiner. For example, nothing in Marlatt shows or suggests a plurality of alarm states having an associated plurality of different sets of physical characteristics, as now recited in claim 7. Rather, it appears that the only emergency state of the device of Marlatt is when a sash is released in the case of a fire. Marlatt has no controller receiving feedback from a sensor as recited in claim 8. Furthermore, there appears to be no teaching or provision in Marlatt to place the door of Marlatt in an alarm state in response to a loss of power as recited in claim 10 of the present application.

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Rejections under 35 U.S.C. §103

To establish a *prima facie* case of obviousness under 35 U.S.C. §103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited prior art reference must teach or suggest all of the claim limitations. Furthermore, the suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based upon the Applicant's disclosure. A failure to meet any one of these criteria is a failure to establish a *prima facie* case of obviousness. MPEP §2143.

Claims

Claims 4, 11-16, 18-20 and 61 were rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Marlatt et al. (U.S. Patent No. 5,263,527, hereinafter "Marlatt"), in view of Crimmins (U.S. Patent No. 6,014,307, hereinafter "Crimmins"). Applicant respectfully traverses this rejection and request reconsideration of the claims.

There is no motivation to combine the patent of Crimmins with the patent to Marlatt. Marlatt already functions to release a door by a mechanical means when a fusible link is burned. Crimmins actually teaches away from a system that includes a fusible link by the disclosure in column 1, lines 46-65. There are no details in Marlatt or Crimmins explaining or suggesting how each of the position monitors, back-up power sources, obstruction sensors, audible and visual alarms, open, close, stop, test and reset buttons and modes are supplied by Crimmins. How they would be applied to Marlatt would require invention. Similarly, application of the release mechanism of Marlatt to Crimmins would destroy a major thrust of the reference to Crimmins, which is an

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automatic controllable system that can be controlled after an emergency condition. Marlatt's release device requires resetting and replacing the fuse line and link before the door may be operated again.

Furthermore, claims 4, 11-16, 18-20, and 61 are considered to be allowable as depending from allowable claim 1 and for further patentable details as may be appreciated by the Examiner.

In particular, claim 16 recited a motor failure sensor. This feature is not disclosed or suggested by Crimmins or Marlatt. Therefore, claim 16 is considered to be allowable.

Claim 61 recites that "the controller is configured to: enter an alarm condition when loss of primary power is detected; and disengage the clutch in pulses and thereby permit the door to fall in controlled increments until the door is completely closed." Crimmins does not disclose entry into an alarm condition when primary power is lost. Rather, the AC light is simply turned off, as set forth in column 9, lines 65-67. Crimmins also fails to disclose the controller configured to disengage the clutch in pulses and thereby permit the door to fall in controlled increments", as also recited. Firstly, Crimmins does not have a clutch. Secondly, the brake of Crimmins does not have the flex plate and rotor included in the clutch of the present invention, as recited in claim 1. Thirdly, Crimmins does not teach controlled descent effectuated by "pulses". Therefore, claim 61 is considered to be allowable over Crimmins and Marlatt.

Claim 5 was rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Marlatt et al. (U.S. Patent No. 5,263,527, hereinafter "Marlatt"), in view of Elliott et al. (U.S. Patent No. 6,155,324, hereinafter "Elliot"). Applicant respectfully traverses this rejection and request reconsideration of the claims.

Claim 5 has been canceled and the matter thereof has been incorporated into allowable claim 6. The rejection of claim 5 is, therefore, obviated.

Applicant respectfully requests that the obviousness rejection of claim 5 be withdrawn.

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Indication of Allowable Subject Matter

The Examiner indicated the allowability of the scope and subject matter of claims 6, 9 and 60, but objected to the form of the claims, they being dependent upon a rejected base claim. Similarly it appears that claim 62 is allowable since it corresponds in large measure to allowable claim 6 and has an added limitation of the motor in combination with the hand crank hoist. Claim 62 was not explicitly addressed in the Office action. Similarly, claim 17 was not explicitly rejected under 35 USC 102 or 103 in the Office action. The references relied upon do not appear to have a spring failure sensor. Therefore, it appears that with the correction of the clarity issues presented herein, claim 17 is also allowable. Applicant wishes to thank the Examiner for this indication of the allowable subject matter. The Examiner also rejected claims 6 and 9 for indefiniteness, which indefiniteness Applicant has corrected. The format of claims 6, 17, 60, and 62 have been amended to place them in allowable form. Claims 6, 17, 60 and 62 have been amended herein without substantially changing their scope by incorporating the elements of the respective base claims upon which they depend and all intervening claims.

Claim 60 has been amended by removing some of the matter considered unnecessary for patentability to correspond in scope to allowable claim 9, but claim 60 has not been rejected for indefiniteness. Therefore, claim 60 is considered to be allowable. (The matter removed from original claim 60 has been presented in new claim 63.)

The only change to the matter incorporated from claim 1 into each of claims 6, 60 and 62 is that the term “rollable door” has been replaced by the term “fire door”, for which there is support in the Specification and Title. The reason for this change is that Applicant has noted that the term “fire door” more accurately describes the present invention which may be practiced with many different types of doors. Applicant respectfully requests that the objection be withdrawn, and that claims 6, 17, 60 and 62 be allowed for the same reasons that they were indicated as allowable in the Office action.

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Regarding Doctrine of Equivalents

Applicant hereby declares that any amendments herein that are not specifically made for the purpose of patentability are made for other purposes, such as clarification, and that no such changes shall be construed as limiting the scope of the claims or the application of the Doctrine of Equivalents.

CONCLUSION

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

The amendments herein added no net new independent claims and non net new dependent claims over those filed originally, resulting in no fees due.

If any fees, including extension of time fees or additional claims fees, are due as a result of this response, please charge Deposit Account No. 19-0513. This authorization is intended to act as a constructive petition for an extension of time, should an extension of time be needed as a result of this response. The examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

Respectfully submitted,

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